What Is Claimed Is:

A method for sterilizing a biological material that is sensitive to ionizing radiation, said method comprising:

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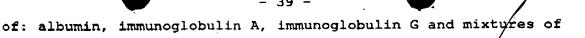
- Not (i)reducing the residual solvent content of a biological material to a level effective to protect said biological material from said ionizing radiation and
- irradiating said biological material with a guitable ionizing radiation at an effective rate for a time 10 0 effective to sterilize said biological material.
 - The method according to claim 1, wherein 2. said solvent is water.
 - The method according to claim 1, wherein 3. said solvent is an organic solvent.
 - The method according to claim 1, wherein 15 said biological material is blood for a component of blood.
 - The method according to claim 1, wherein 5. said biological material is a proteinaceous material.
 - The method according to claim 5, wherein 6. said proteinaceous material is a component of blood. 20
 - The method according to claim 1, wherein 7. said biological material is a clotting factor.
 - The method according to claim 7, wherein 8. said clotting factor is selected from the group consisting of: Factor II, Factor V, Factor VII, Factor VIII, Factor VIII, 25 Factor IX, Factor/X, Factor XIII, Factor XIIIa, Von Willebrand's Factor and Fibrinogen.
 - The method according to claim 1, wherein said biological material is selected from the group consisting

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one or more immunoglobulins.

mammalian tissue.

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- The method according to claim 1, wherein said biological material is mammalian tissue or a component of
 - The method according to claim/1, wherein 11. said biological material is a recombinantly-produced biological material.
- 12. The method according to claim 1, wherein said biological material is a transgenic biological material. 10
 - The method according to claim 1, wherein 13. said biological material is a food or a botanical product.
 - The method according to claim 1, wherein 14. said ionizing radiation is gamma radiation.
- The method according to claim 1, wherein 15 15. said biological material is a carbohydrate or polysaccharide.
 - The method according to claim 1, wherein 16. said biological material is selected from the group consisting of chitin, chitosan, NOCC-chitosan and derivatives thereof.
- The method according to claim 1, wherein 20 17. said biological material is a product of cellular metabolism.
 - The method according to claim 1, wherein 18. said effective rate is not more than about 3.0 kGy/hour.
- The method according to claim 1, wherein 19 . said effective rate is more than about 3.0 kGy/hour. 25
 - The method according to claim 1, wherein 20. said effective rate is not more than about 6.0 kGy/hour.



- 21. The method according to claim 1, wherein said effective rate is not more than about 18.0 kGy/hour.
- 22. The method according to claim 1, wherein said effective rate is not more than about 30.0 kGy/hour.
- 5 23. The method according to claim 1, wherein said biological material is maintained in a low oxygen atmosphere.
 - 24. The method according to claim 23, wherein said biological material is maintained in an argon atmosphere.
- 10 25. The method according to any one of claims 1-24, wherein said residual solvent content is reduced by lyophilization.
 - 26. The method according to claim 25, wherein said residual solvent content is less than about 2.0%.
- 15 27. The method according to claim 25, wherein said residual solvent content is less than about 1.0%.
 - 28. The method according to claim 25, wherein said residual solvent content is less than about 0.5%.
- 29. The method according to any one of claims
 20 1-24 and 26-28, wherein at least one sensitizer is added to
 said biological material prior to step (ii).
 - 30. A method for sterilizing a biological material that is sensitive to ionizing radiation, said method comprising:
- 25 (1) adding to a biological material at least one stabilizer in an amount effective to protect said biological material from said ionizing radiation; and

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- (ii) irradiating said biological material with a suitable ionizing radiation at an effective rate for a time effective to sterilize said biological material.
- 31. The method according to claim 30, wherein 5 said at least one stabilizer is an antioxidant.
 - 32. The method according to claim 30, wherein said at least one stabilizer is a free radical scavenger.
- 33. The method according to claim 30, wherein said at least one stabilizer is selected from the group consisting of: ascorbic acid or a salt or ester thereof, glutathione, tocopherol, 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid, rutin and other flavanoids.
 - 34. A method for sterifizing a biological material that is sensitive to ionizing radiation, said method comprising:
 - (i) reducing the residual moisture content of a biological material to a level effective to protect said biological material from said ignizing radiation;
- (ii) adding to said biological material at least one stabilizer in an amount effective to protect said biological material from said ionizing radiation; and
 - (iii) irradiating said biological material with a suitable ionizing radiation at an effective rate for a time effective to sterilize said biological material.
- 25 35. A method for sterilizing a biological material that is sensitive to ionizing radiation, said method comprising:
- (i) adding to a biological material at least one stabilizer in an amount effective to protect said
 30 biological material from said ionizing radiation;

- (ii) reducing the residual moisture content of said biological material to a level effective to protect said biological material from said ionizing radiation; and
- (iii) irradiating said biological material with a suitable ionizing radiation at an effective rate for a time effective to sterilize said biological material.